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### Financial Disclosures:

Dr Charpentier has, since 2007 been an investigator, consultant or speaker for Astra-Zeneca, Bayer, Boehringer, Eli Lilly, Johnson & Johnson, Medtronic, Merck Serono, Merck Sharp Dome, Novartis, Novo Nordisk, Pfizer, Roche, Sanofi-Aventis, Siemens and Takeda. Prof. Benhamou has received grants for his institution from CERITD and is a member of the boards of MSD Chibret, Roche, and Diagnostics. He has received payment for the development of educational presentations including speakers office services for Eli Lilly, Novo Nordisk, Novartis, MSD-Chibret, Sanofi-Aventis, and Roche. He has had travel and accommodation expenses covered or reimbursed by Novartis, Abbott and Eli Lilly. Dr Borot has received grants for her institution from CERITD. She has received honoraria from Takeda, Aventis and VitalAire and has hd travel and accommodation expenses covered or reimbursed by Novartis, Eli Lilly, Aventis and Servier. Dr Schaepelynck-Belicar has received grants and support in kind, such as writing, the provision of medicines or equipment or administrative support for her institution from CERITD. Dr Franc is a member of the Board of Roche Diagnostics, consultant for Novonordisk and speaker for Sanofi-Aventis, GSK, Novonordisk, Abbott, Eli Lilly, Novartis and Takeda.

Dr Chaillous has received grants for her institution from Astra-Zeneca, CERITD, Lilly, Novo-Nordisk, Merck Serono, Pfizer, Sanofi-Aventis, and Schering-Plough. She has received honoraria from Novo Nordisk, Pfizer, and Sanofi-Aventis and payment for the development of educational presentations including speakers office services, for Bristol-Myers-Squibb, Glaxo-Smith-Kline, Menarini, Novo-Nordisk, Sanofi-Aventis, and Servier. She has had travel and accommodation expenses covered or reimbursed by Abbott, Bristol-Myers-Squibb, Eli Lilly, Merck, Medtronic, Novo-Nordisk, Pfizer, Roche Diagnostics, Sanofi-Aventi, and Servier. Dr Leguerrier has received honoraria from Astra Zeneca, BMS, Sanofi Aventis, GSK, Novo-Nordisk, Eli Lilly and Novartis. She has received payment for the development of educational presentations including speakers office services, for Astra-Zeneca, Novo-Nordisk, Eli Lilly, Sanofi Aventis, BMS and Novartis. Dr Monier Pudar has been a consultant for Becton Dickinson, Eli Lilly, Novartis, Novo-Nordisk, and Sanofi-Aventis. She has been paid for manuscript preparation for Becton Dickinson, and for the development of educational presentations including speakers office services for Eli Lilly, GSK, Johnson & Johnson, Novartis, Novo-Nordisk, Sanofi-Aventis, and Takeda. She has had travel and accommodation expenses covered or reimbursed by Eli Lilly, Novartis, Novo-Nordisk, Roche Diagnostic, Sanofi-Aventis and Takeda. Dr Moreau has received grants for his institution from CERITD. He has been a consultant for Abbott, GlaxoSmithKline, Merck-Serono, Novo-Nordisk, Pfizer, and Sanofi-Aventis. He has also provided expert advice to Servier and has received payment for the development of educational presentations including speakers office services for GlaxoSmithKline, Novo-Nordisk, and Sanofi-Aventis. He has had travel and accommodation expenses covered or reimbursed by Bristol-Myers Squibb, Eli Lilly and Servier. Dr Winiszewski

has received honoraria from Merck Serono, MSD, Sanofi Aventis and Urgo. Dr Vamberque has received grants for her institution from CERITD. Dr Millot has received honoraria from Sanofi-Aventis, Pfizer, Eli Lilly, Novo-Nordisk, GlaxoSmithKline, Takeda, Bristol-Myers Squibb, Novartis, AstraZeneca and Merck Sharp & Dohme. He has had travel and accommodation expenses covered or reimbursed by Eli Lilly, Novartis and Novo-Nordisk. Dr Reffet received payment for the development of educational presentations including speakers office services from Sanofi-Aventis. Dr Quesada is employed by the University Hospital of Grenoble and has received payment for manuscript preparation, for writing or reviewing manuscrips, and for fees for participation in review activities, such as data monitoring boards, statistical analysis, endpoint committees, and similar. Dr Clergeot has received grants for his institution from CERITD. Prof. Halimi has received grants for his institution from CERITD and is a member of the boards of Novartis, Sankyo, GSK, Boehringer-Ingelheim, Roche Pharma and Roche Diagnostics. He has received grants for his institution from MSD Chibret and honoraria from Boehringer-Ingelheim. He has received payment for the development of educational presentations, including speakers office services from Eli Lilly, Novo Nordisk, Novartis, MSD-Chibret, Sanofi Aventis, Roche Pharma, Roche Diagnostics, Takeda, Servier and Johnson & Johnson. He has had travel and accommodations expenses covered or reimbursed by Abbott, Novartis, Servier and Sanofi Aventis. Dr Ronsin has received grants for her institution from CERITD. She was a speaker for Novo Nordisk in 2009. Dr Renard is a consultant for Roche Diagnostics, Novo Nordisk France, Novo Nordisk, Disetronic Medical Systems and Sanofi Aventis. He has received honoraria from Lilly-France, Medtronic and Novartis, and payment for the development of educational presentations including speakers office services, from Sanofi Aventis and Eli Lilly. He has had travel and accommodation expenses covered or reimbursed by Eli Lilly, Novo Nordisk, Novartis, Takeda and Abbott. Prof. Thivolet is for a member of the boards of Medtronic, Novo Nordisk and Sanofi Aventis, and a consultant for Roche Diagnostics and MSD. He has had travel and accommodation expenses covered or reimbursed by Sanofi Aventis, Abbott and Lilly Laboratories. Dr Bosson is employed by the University Hospital of Grenoble and his institution has received payment for manuscript preparation, for writing or reviewing manuscripts, and fees for participation in review activities, such as data monitoring boards, statistical analysis, end-point committees, and similar. His institution has had travel/accommodation expenses covered or reimbursed. Prof. Penfornis has received grants for his institution from CERITD. He is a member of the boards of AstraZeneca, Bristol-Myers Squibb, Novartis, Novo Nordisk and Sanofi Aventis and is a consultant for Novo Nordisk. He has received gifts for his institution from Eli Lilly, Merck Sharp & Dohme, Novo Nordisk and Sanofi Aventis and grants for his institution from Sanofi Aventis. He has received payment for the development of educational presentations including speakers office services from Abbott, Eli Lilly, Medtronic, Merck-Serono, Merck Sharp & Dohme, Novartis, Novo Nordisk, Pfizer, Sanofi Aventis and Takeda. His institution has received payment for the development of educational presentations including speakers office services from Bristol-Myers Squibb, Merck Sharp & Dohme, Sanofi Aventis and Takeda. He has had travel and accommodation expenses covered or reimbursed by Abbott, AstraZeneca, Boehringer-Ingelheim Pharmaceutical, Eli Lilly, GlaxoSmithKline, Medtronic, Merck-Serono, Merck Sharp & Dohme, Novartis, Novo Nordisk, Sanofi Aventis, Servier and Takeda.

Supplementary Table 1. Between-groups comparison of HbA1c at M6, adjusted for age

and initial HbA1c (ANCOVA analysis).

Source	Partial SS	df	MS	F	Prob > F
Model	110.370924	4	27.5927311	43.38	0.0000
groups	24.2500621	2	12.125031	19.06	0.0000
Age	3.23187191	1	3.23187191	5.08	0.0255
HbA1c_M0	78.3332149	1	78.3332149	123.16	0.0000
Residual	106.849888	168	0.63601124		
Total	217.220813	172	1.2629117		

Number of obs = 173

R-squared = 0.5081

Root MSE = 0.797503

Adj R-squared = 0.4964

# Supplementary Table 2. between-group comparison of the change in HbA1c between M0 an M6

HbA1c	HbA1c M0	HbA1c M6	Delta HbA1c M6- M0	6-month HbA1c between-group comparisons CI 95%	P value
Group 1 (n=60)	8.92 – 0.91	9.10 – 1.16	0.18 – 0.83	G1 vs G2 0.67 [0.35 ; 0.99]	≤ 0.001 <sup>(1)</sup>
Group 2 (n=56)	9.12 – 1.01	8.63 – 1.07	-0.49 – 0.89	G1 vs G3 0.91 [0.60 ; 1.21]	≤ 0.001 <sup>(1)</sup>
Group 3 (n=57)	9.14 – 1.15	8.41 – 1.04	-0.73 – 0.84	G2 vs G3 0.24 [-0.08 ; 0.56]	0.417 <sup>(1)</sup>

Results expressed as mean  $\pm$  SD; (1) ANOVA

# Supplementary Table 3. Quality of life assessment estimated by the DHP score

DHP Questionnaire	DHP Population (n=180)	DHP M0	DHP M6	P value
disinhibited eating (DE)	Total population	38.3 – 23.1	36.8 – 21.3	0.7872(2)
	Group 1	38.2 ± 25.2	37.1 ± 22.8	
	Group 2	37.6 ± 20	36.5 ± 21.9	0.9288 <sup>(1)</sup>
	Group3	39 ± 23.9	36.8 ± 19.2	
Psychological distress (PD)	Total population	37 – 10.7	35.8 – 9.5	0.2447 <sup>(2)</sup>
	Group 1	39.1 ± 10.7	37.3 ± 9.3	
	Group 2	34.9 ± 8.9	35.3 ± 8.8	0.2363 <sup>(1)</sup>
	Group3	37 ± 12.1	34.8 ± 10.4	
Barriers to activity (BA)	Total population	19.3 – 14.1	18.9 – 13.3	0.5906 <sup>(2)</sup>
	Group 1	23.3 ± 15.3	21.9 ± 13.6	
	Group 2	16.2 ± 11.9	16.8 ± 11.7	0.6060 <sup>(1)</sup>
	Group3	17 ± 13	16.7 – 13.1	

DHP: Diabetes Health Profil (1) Anova with repeated measures (Interaction group/visit term)

(2) Wilcoxon signed-rank test

## Supplementary Table 4. quality of life assessment estimated by the DQOL

Insulin doses	Insulin doses at M0	Insulin doses at M6	Delta Insulin doses M6-M0	Insulin doses 6-month between-group comparisons	P value
Group 1 (n=55)	23.8 – 8.3	22.8 – 9.4	-1 – 5	G1 vs G2 : 3.3 [0.2 ; 6.4]	
Group 2 (n=51)	24.2 – 9	26.5 – 15.1	2.3 – 10.4	G1 vs G3 3.3 [0.7 ; 5.9]	0.1271 <sup>(2)</sup>
Group 3 (n=56)	27.7 – 11.5	30.1 – 15	2.3 – 8.4	G2 vs G3 0 [-3.6 ; 3.6]	

DQOL: Diabetes Quality of Life - <sup>(1)</sup>Anova with repeated measures (Interaction group/visit term) - <sup>(2)</sup>Wilcoxon signed-rank test

# Supplementary Table 5. between-group comparison of the change in basal insulin doses between M0 an M6

Insulin doses	Insulin doses at M0	Insulin doses at M6	Delta Insulin doses M6-M0	Insulin doses 6- month between- group comparisons	P value
	at MO	at ivio	IVIO-IVIO	group compansons	
Group 1	23.8 – 8.3	22.8 – 9.4	-1 – 5	G1 vs G2 :	
(n=55)	20.0 0.0	22.0 0.1	. 0	3.3 [0.2 ; 6.4]	
Group 2	24.2 – 9	26.5 – 15.1	2.3 – 10.4	G1 vs G3	0.1271 <sup>(2)</sup>
(n=51)	24.2 – 9	20.5 – 15.1	2.5 – 10.4	3.3 [0.7 ; 5.9]	U. 127 1 <sup>-7</sup>
Group 3	07.7 44.5	20.4 45	0.0 0.4	G2 vs G3	
(n=56)	27.7 – 11.5	30.1 – 15	2.3 – 8.4	0 [-3.6 ; 3.6]	

Results expressed as mean ± SD; (2)Kruskal Wallis test